

Title (en)

WIRELESS IN-KILN MOISTURE SENSOR AND SYSTEM FOR USE THEREOF

Title (de)

DRAHTLOSER FEUCHTIGKEITSSENSOR IN EINEM OFEN UND SYSTEM ZUR VERWENDUNG DESSELBEN

Title (fr)

CAPTEUR SANS FIL D'HUMIDITÉ EN SÉCHOIR ET SYSTÈME D'UTILISATION ASSOCIÉ

Publication

EP 2870423 B1 20180425 (EN)

Application

EP 13813021 A 20130703

Priority

- US 201261667942 P 20120704
- US 2013049287 W 20130703

Abstract (en)

[origin: US2014009174A1] A wood monitoring system and method is disclosed for monitoring lumber characteristics (e.g., lumber moisture) in environments of extremely high and prolonged temperature and moisture, e.g., a kiln. The monitoring system and method includes: (a) Sensors (provided within lumber stacks), wherein such sensors are battery powered and wirelessly communicate measurements indicative of moisture content of the wood adjacent to and/or between metal plates provided in an electrical circuit with the sensors and the wood between the plates; (b) Computer implemented methods and systems for wireless communication that conserve sensor battery power such that the sensors can operate for, e.g., six months within extremely adverse temperature and moisture environmental variations; and (c) Computer implemented methods and systems for estimating moisture content with a wood/lumber stack, and for predicting such moisture content (e.g., as a substantially steady state within the wood) after drying completion.

IPC 8 full level

G01N 27/04 (2006.01); **F26B 21/02** (2006.01); **F26B 21/08** (2006.01); **F26B 25/22** (2006.01); **G01N 27/22** (2006.01); **G01N 33/46** (2006.01)

CPC (source: EP US)

F26B 21/02 (2013.01 - EP US); **F26B 21/08** (2013.01 - EP US); **F26B 25/22** (2013.01 - EP US); **G01N 27/048** (2013.01 - EP US); **G01N 27/223** (2013.01 - EP US); **G01N 33/46** (2013.01 - EP US); **F26B 2210/16** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 2014009174 A1 20140109; **US 9222906 B2 20151229**; CA 2879291 A1 20140109; CA 2879291 C 20170912; EP 2870423 A2 20150513; EP 2870423 A4 20160511; EP 2870423 B1 20180425; US 2016169826 A1 20160616; US 2017322169 A1 20171109; WO 2014008376 A2 20140109; WO 2014008376 A3 20140227

DOCDB simple family (application)

US 201313934887 A 20130703; CA 2879291 A 20130703; EP 13813021 A 20130703; US 2013049287 W 20130703; US 201514981601 A 20151228; US 201715660479 A 20170726